



Algebraically Speaking

Write an equation:

Rita has \$5 in her purse. This is \$12 less than she had before she went shopping. How much did she have when she went to the mall?.

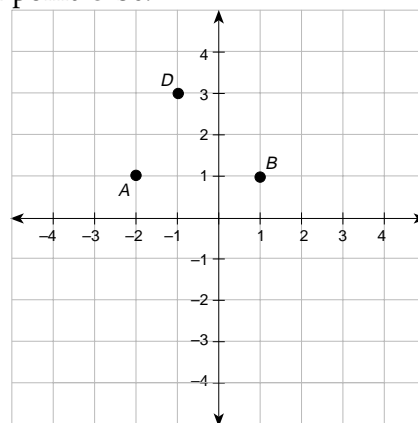


(5.03)



Mathmania

In order to construct trapezoid $ABCD$, what would the coordinate of point C be?



(Review)



Investigate Data

The data values below are the speeds (in kilometers per hour) of ten trucks traveling on Interstate 95.

80, 65, 70, 60, 60, 70, 73, 70, 59, 46

Construct a box plot to represent this data. Compute the mean. How does the mean compare with the median?

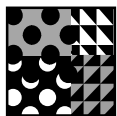
(4.02)



Solve It!

Mo, Ro and Bo have less than 20 tokens. Ro has more than Mo and Mo has more than Bo. Ro gives Bo three tokens and Mo gives Bo two. Now they each have the same number. How many tokens did they start with?

(1.03)



Geometry Rules

Tommy is wrapping a birthday present in a box which has a top with an area of 120 square inches. The front of the box has an area of 96 square inches. The area of the end is 80 square inches. What are the dimensions of the box?

(Review)



Write On!

$$7x = 84$$

Write a story or situation to “fit” this equation.

(5.03)



Keeping Skills Sharp

Write answers here:

1. $15 \times 72 =$

8. $2m - 2 + 49 \div 7 = 15$

1. _____

2. $6 - b + 4 \times 2 = 12$

9. Nearest thousandth to:
0.0795

2. _____

3. $\frac{9}{16} \times 6\frac{2}{3} =$

3. _____

4. Determine the missing number:

{1, 3, 7, 13, , ...}

4. _____

5. Write the prime factorization of 360.

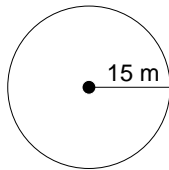
5. _____

6. Find the GCF of 48 and 54.

6. _____

7. Find the area:

7. _____



8. _____

9. _____

10. _____



Mental Math

Directions to Students:

Write your answers as the questions are called out.
Each question will be repeated only once.

1 _____

6 _____

2 _____

7 _____

3 _____

8 _____

4 _____

9 _____

5 _____

10 _____

Answer Key

Grade 7

WEEK
7

Algebraically Speaking

$$\$5 = n - \$12 \quad n = \$17$$

Geometry Rules

$$12'' \times 10'' \times 8''$$

Math Mania

(x, y) such that $x > -1$, but $\neq 2$
and $y = 3$

Solve It

Two possibilities [Ro, Mo, Bo]

[8,7, 0] or [9, 8, 1] 18 is the maximum starting number of tokens.

Write On

Answers will vary. Sample:

84 people are coming to a banquet. Each table seats 7 people. How many tables will be needed for the banquet?

Investigate Data

mean = 65.6

median 67.5

Keeping Skills Sharp

- 1,080
- $b = 2$
- $3\frac{3}{4}$
- 21
- $2^3 \times 3^2 \times 5$
- 6
- 706.9 m²
- 5
- 0.080
- 7

Mental Math

This section provides an opportunity for sharpening students' mental computation.

- $150 \times 2 \div 6 + 7$
- $84 - 35.8$
- $\frac{2}{3} \div 8$
- What is the difference between 452 and 225?
- $12\frac{9}{10} - 6\frac{2}{5}$
- Rename $\frac{5}{8}$ as a percent.
- $? + 53.7 = 100$
- 30×600
- $\frac{3}{8}$ of 64
- $? + 7.5 + 2 = 12$

Mental Math Answers

- 57
- 48.2
- $\frac{1}{12}$ or $\frac{2}{24}$
- 227
- $6\frac{5}{10}$ or $6\frac{1}{2}$
- $62\frac{1}{2}\%$
- 46.3
- 18,000
- 24
- 2.5



Algebraically Speaking

Write and solve an equation.

Dee picked 24 apples. This is 8 fewer than Jack picked. How many did Jack pick?

(5.03)



Mathmania

Find a Pattern

$3^1 = 3$, $3^2 = 9$, $3^3 = 27$, $3^4 = 81$; the products have 3, 9, 7, 1 respectively in the one's place. If you compute 3^{15} , what number will be in one's place? Is there a similar pattern for 4^1 , 4^2 , 4^3 , 4^4 ...?

(Review)



Investigate Data

What is the difference between the mean and the median of this set of data?

6	1 6 8 9
7	1 2 4
8	3 5 8
9	0 1 1 2 4

(4.01)

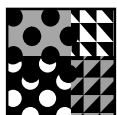


Solve It!

One number is 12 less than the other.

Their product is -32 . What is the least value the smaller number could be?

(1.03)



Geometry Rules

A rectangular sign has an area of 128 cm^2 and a perimeter of 48 cm. The measure of one side is twice the other side. What are the dimensions of the sign?



(review)



Write On!

Read this statement carefully:

“In an addition problem, the sum is always greater than either of the addends.”

Example: $5 + 4 = 9$ $9 > 5$ and $9 > 4$

Based on what you have learned about adding integers, write an explanation which proves the above statement is false. Explain how a sum can be smaller than one or both of the addends.

(1.02)



Keeping Skills Sharp

Write answers here:

1. $1,672 \div p = 209$

2. $1.4 + n + 3.6 = 7.5$

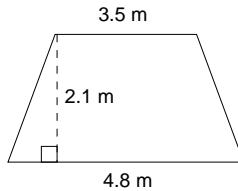
3. $4 \div \frac{2}{9} =$

4. 86% of $106 =$

5. Write the prime factorization of 104.

6. Find the LCM of 15 and 50.

7. Find the area
of this trapezoid:



8. $[6.2 + (8.7 - 4)] \times 10 =$

9. Nearest dollar to \$28.91

10. Nearest integer to $4.18 \div 0.68$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Mental Math

Directions to Students:

Write your answers as the questions are called out.
Each question will be repeated only once.

1 _____

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7 _____

3 _____

8 _____

4 _____

9 _____

5 _____

10 _____

Answer Key

Grade \rightarrow

WEEK
8

Algebraically Speaking

$$24 = j - 8 \quad j = 32$$

Math Mania

The digit 7 will be in the one's place.

$$(3^{15} = 14,348,907)$$

Yes, $4^1 = 4$, $4^2 = 16$, $4^3 = 64$, $4^4 = 256$

6,4,6.... Even powers are 6; odd powers are 4.

Solve It

-8

Write On

answers will vary

Investigate Data

mean is $79.\overline{6}$ median is 83

difference is $3.\overline{3}$

Geometry Rules

8 cm by 16 cm

Keeping Skills Sharp

- 8
- 2.5
- 18
- 91.16
- $2^3 \times 13$
- 150
- 8.715 m^2
- 109
- \$29
- 6

Mental Math

This section provides an opportunity for sharpening students' mental computation.

- 1 kilometer = _____ meter(s)
- $\frac{1}{3} = ? \%$
- $3\frac{1}{2} + 5.5$
- $7^2 - 6.5$
- $10^3 \times 5^2$
- $(1,252)^0$
- $\frac{3}{5} \div \frac{6}{5}$
- What is the product of 17 and 10?
- $3^2 - 2^3 + 30$
- $42 = 51 - ?$

Mental Math Answers

- 1,000
- $33\frac{1}{3}$ or $33.\overline{3}$
- 9
- 42.5
- 25,000
- 1
- $\frac{1}{2}$
- 170
- 31
- 9



Algebraically Speaking

Mark has the same secret number hidden in each envelope. The number sentence below is true. What number must be in the envelope?

$$\square + \square + \square + 180 = 105$$

(5.03)



Mathmania

You receive a penny on January 1st, two cents the next day, four cents the next and so on, doubling every day. How long will it take to be a millionaire? Suppose you started with a nickel and doubled, how long before you were worth a million dollars?

(Review)



Investigate Data

Use a box plot to display this data from a survey of heights (cm) of middle school students.

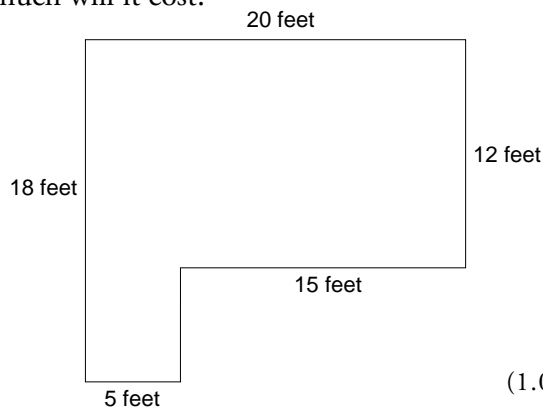
ht	frequency	ht	frequency
125	8	150	5
127	3	155	2
130	3	165	9
138	7	185	1
146	8	189	4

(4.01)

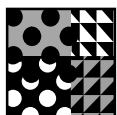


Solve It!

Mrs. Jones wants to put a wallpaper border around her den. The border costs \$15.99 per 5 yard roll. How many rolls will she have to buy and how much will it cost?

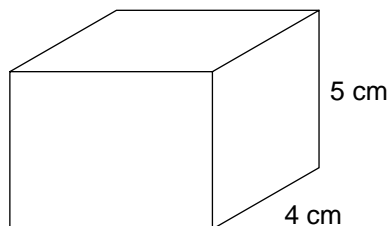


(1.02)



Geometry Rules

If the volume of this rectangular prism is 80 cm^3 , what is the length?



(2.02)



Write On!

Write an equation and solve it.

A number increased by 1.8 is 5.03.

(5.03)



Keeping Skills Sharp

Write answers here:

1. $3,584 + 8,258 =$

1. _____

2. $8.87 \div r = 22.175$

2. _____

3. $3\frac{3}{4} \div 1\frac{1}{8} =$

3. _____

4. $\frac{1}{2}\%$ of 50 =

4. _____

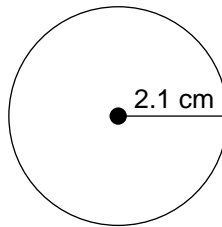
5. Write the prime factorization of 189.

5. _____

6. Find the GCF of 42 and 63.

6. _____

7. Find the circumference:



7. _____

8. $125 - 43 + c = 95$

8. _____

9. Nearest thousandth to 0.41275

9. _____

10. Estimate: $356 \div 59$

10. _____



Mental Math

Directions to Students:

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Each question will be repeated only once.

1 _____

6 _____

2 _____

7 _____

3 _____

8 _____

4 _____

9 _____

5 _____

10 _____

Answer Key

Grade \rightarrow

WEEK
9

Algebraically Speaking

-25 in the envelope

Write On

$$n + 1.8 = 5.03; n = 3.23$$

Math Mania

\$1,000,000.00	\$1,000,000.00
in 27 days	in 25 days
starting with	starting with
\$0.01	\$0.05

Investigate Data

median = 146; 1st quartile = 130;
3rd quartile = 165

Solve It

6 rolls at \$95.94

Geometry Rules

4 cm

Keeping Skills Sharp

- 11,842
- 0.4
- $3\frac{1}{3}$
- 0.25
- $3^3 \times 7$
- 21
- 13.2 cm
- 13
- 0.413
- 6

Mental Math

This section provides an opportunity for sharpening students' mental computation.

- Nearest hundredth to 2.346
- Nearest tenth to 4.62
- Nearest whole number to 5.7
- Nearest whole number to 9.8
- Nearest ten to 23.5
- Nearest hundred to 462
- Nearest whole number to 49.8
- Nearest tenth to 56.992
- Nearest whole number to 699.5
- Nearest hundredth to 8.795

Mental Math Answers

- 2.35
- 4.6
- 6
- 10
- 20
- 500
- 50
- 57.0
- 700
- 8.80